

11 September 2001

Mr. Rick Bolfig
Engineering Associate
Air Permit Section
KDHE/BAR
1000 SW Jackson, Suite 310
Topeka, KS 66612-1366

Dear Mr. Bolfig:

The following initial comments/questions are in regard to the proposed Class I Title V air operating permit for the McPherson Power Plant #3 located at 1486 17th Avenue in McPherson, Kansas (source ID number 1130046). The EPA would like to note that we do not consider the application or the Statement of Basis to be an integral part of the operating permit. If there is something in the application or Statement of Basis that needs to be in the permit, it must be incorporated (or at least referenced) in the permit itself. Also, please send a copy of the final permit and final Statement of Basis to Gary Schlicht of my staff at the regional office (mail code ARTD/APCO).

The comments from EPA-Region 7 on the proposed Title V air operating permit for McPherson Power Plant #3 are as follows, with potentially significant comments marked with an asterisk. These comments do not constitute an objection under 40 CFR 70.8(c).

- 1) * As Region 7 has not reviewed a lot of CAM plans, we would just like to make certain observations about McPherson's submittal. Rather than say it is acceptable or not acceptable, as such, we would like to hit some good points and some not so good points. We will ask certain questions along the way which will hopefully be considered in future CAM plans. There is no example illustration from the CAM Technical Guidance Document for turbine NOx control using water injection, although one is planned at some point in the future.

The source followed a suggested format obtained from the CAM Technical Guidance Document and, therefore, pretty much included all the necessary general and performance criteria information. Generally, CAM would be expected to increase monitoring requirements. However, since Subpart GG requires an affected turbine using water injection for NOx control to install and operate CMS to monitor the operations, other monitoring is probably not necessary. At §64.4(b), it talks about "presumptively acceptable monitoring" in certain cases. It is stated in §64.3(d)(1) that if the use of CEMS, COMS or PEMS is required by the Act or state or local law, "the owner or operator shall use such system to satisfy the requirements of this part." In this case, Subpart GG requires the PEMS pursuant to "Section 60.13 and Appendix B of part 60 of this chapter," as stated at §64.3(d)(2)(ii).

For the CAM submittal, did the source submit more than just the two page CAM plan? The submittal requirements are listed at §64.4(a) through (g). We do not think (d) through (g) apply in this case. However, unless there was more than the two pages submitted, the “justification” section was weak. It only stated that the performance test was done and that the results were sent to KDHE. While this test data is required, at 64.4(c)(1), to support the “justification,” there are other elements of the “justification” which are discussed at §64.4(b). An example of a “justification” is found in the document entitled “FAQ’s Concerning the CAM Rule.” It can be found in two parts on the R7 Title V Policy & Guidance Database. Also, at §64.4(c)(2) is a requirement that the “owner or operator must document that no changes to the pollutant-specific emissions unit, including the control device and capture system, have taken place that could result in a significant change in the control system performance or the selected ranges or designated conditions for the indicators to be monitored since the performance or compliance tests were conducted.” Was this requirement documented by the source?

The required operating permit terms are discussed at §64.6(c). Be sure that all of these conditions are in the permit. Please note (c)(3), where it states that “the obligation to conduct the monitoring and fulfill the other obligations specified in §§ 64.7 through 64.9” should be a permit condition. §64.7 deals with the operation of approved monitoring. §64.8 deals with Quality Improvement Plan (QIP) requirements. While optional, BAR might consider including a QIP threshold (e.g., five excursions in a six month reporting period) in the permit. If the threshold is exceeded, a QIP would be developed and implemented. §64.9 deals with recordkeeping and reporting requirements. Insure that each requirement is provided for in the permit including the annual compliance certification.

- 2) The letter dated 6/22/01 from you to R7 states that there are two items yet to be incorporated into the proposed permit involving alternative methods for compliance and alternative monitoring. It also states that the permit application has errors that need to be corrected. How can the proposed permit package be put out for public comment when it is not complete? Please make sure that the (2) items and corrections, as mentioned in the 6/22/01 cover letter, are included in the final permit.
- 3) * In the construction permit, there are recordkeeping requirements in number 2 which are found at §60.7(f). The construction permit incorrectly stated the cite as §60.7(e). We did not see where these requirements were carried over to the operating permit. These requirements should be included in the operating permit in relation to both the CMS for NOx and the CMS for #2 fuel flow.
- 4) * In the construction permit, there are reporting requirements in number 4 which are stated in the operating permit under A(6), the middle paragraph under Reporting and Recordkeeping. They reference §60.334(c)(1). There are two reporting items mentioned in §60.334(c)(1) and the construction permit that are not included in the operating permit, namely, “nitrogen content of the fuel during the period of excess emissions” and “graphs

or figures developed under §60.335(a).” These items should be included in the operating permit.

- 5) * In the construction permit, there are reporting requirements in number 3 which are stated in the operating permit under A(6), the last paragraph under Reporting and Recordkeeping. However, the construction permit and §60.7(d) include the statement that “the summary report form shall contain the information and be in the format as specified in §60.7(d).” This requirement was not carried over to the operating permit.

Also, the very next sentence calls for “one summary report form for NO_x and one summary report form for the sulfur content of fuel” to be submitted. The summary report for NO_x is required at A(7) in the operating permit. However, we can see no place where the summary report for the sulfur content of fuel is required in the operating permit. This reporting requirement should be included in the operating permit perhaps at A(3) or at A(7). Again, as in the previous paragraph, the information and format specified at §60.7(d) would apply.

- 6) * The true vapor pressure limitation (Page 4, #8 of 6/3/96 construction permit) was not carried over to the permit. This should be included in section C of the permit.
- 7) Under the summary of applicable requirements on page three, Part 60 Subpart A (the general provisions) should be included. Emission sources in the permit are subject to Part 60 regulations and Subpart A is referenced in the permit.
- 8) In A(1), one M9 evaluation is required when operating with fuel oil during any semiannual reporting period. What is the difference between this facility and one that is required to do *daily qualitative* readings while firing fuel oil (which we have seen before)? Is this scenario not viable here? We could also suggest daily qualitative readings with M9 evaluations (as necessary) only if the opacity appears to be greater than 20%.

In the paragraphs for fuel oil use, the compliance demonstration and MRR sections are repetitive to some extent. The repetitive sentences can be deleted. Some statements in the MRR section could move to the Compliance Demo section. Some recordkeeping requirements need to be added to the MRR section (there are none).

We are not sure what is meant by some of the statements under fuel oil use in the MRR section. The M9 evaluation is to be done “if at any time during the semiannual reporting period the facility burns fuel oil.” It should also state that the M9 evaluation should be done when fuel oil is being burned. This is implied but not really stated. It goes on to say that the M9 evaluation “shall be conducted within that semiannual period or the subsequent semiannual reporting period.” What does this mean regarding the “subsequent semiannual reporting period?” The next sentence says, “If the M9 evaluation is performed in the subsequent semiannual reporting period, the M9

evaluation shall not constitute operation on fuel oil and shall not require further testing.” Please explain this sentence as it makes no sense to us as written. If fuel oil is being burned during a reporting period, an M9 is done at some point in that reporting period when the fuel oil is actually being burned and the results reported for that reporting period.

- 9) * In A(1), the last paragraph should be revised. It is too general. We assume that the combustion turbine unit at McPherson #3 is currently classified as gas-fired. We would refer you to 8/21/01 e-mail regarding COMS use at the Murray Gill facility and, in particular, the following 2 paragraphs:

The COMS monitoring requirements for all four boilers could use language from §75.14(a) and §75.10(a)(4) of the acid rain regulations. It should also be stated in the permit that once the COMS requirement is triggered, the requirement is permanent and that the COMS must be operated at all times, during both gas and oil use. It can be stated that compliance with these requirements will deem compliance with KAR 28-19-31(b)(1). Records of opacity data shall be kept as stated in §75.54(f) or 75.57(f). Records should also be kept of excess emissions of opacity and reported as stated in §75.65. Language from Attachment C item 3 (1) can be used.

For future reference, if an acid rain affected unit capable of firing both gas and oil is currently classified as gas-fired (see Part 72 definitions) when the T5 permit is written, there should be statements in the permit reminding the source of the COMS requirements (above paragraph) which would kick in if and when the unit is reclassified as oil-fired (see Part 72 definitions). It should also be stated that once the COMS requirement is triggered, the COMS requirement is permanent and must be used for all periods of operation regardless of whether gas or oil is being fired.

Also, be aware of the Part 75 opacity monitoring exemption at §75.14(d) for affected diesel-fired units that meet the definition of “diesel-fired unit” and “diesel fuel” under §72.2!

- 10) In A (1) second from last paragraph (and other places), consider not using language which may possibly be construed as credible evidence buster language. Also, consider revising the section labels. Please refer to the 7/31/01 e-mail to Ralph Walden regarding “T5 permit format suggestions.” Items #2 and #3 discuss the above issues.
- 11) In B (2), consider improving the MRR requirements (compliance demo and reference test method/recordkeeping/monitoring) for indirect heating particulate matter emissions. Please refer to the 7/3/01 e-mail to Ralph Walden regarding “T5 permit requirements.”
- 12) Please add page numbers as the table of contents lists page numbers!
- 13) In B, the permit lists four natural gas fired space heaters as being subject to opacity

limits. The emission source information table on page three also shows four space heaters. However, the permit application and site diagram both list only three space heaters and a furnace for the maintenance building. Which is correct? Please revise accordingly wherever necessary.

- 14) Were all of the non-compliance issues that were mentioned on the Compliance Schedules (CD-03) in the application fulfilled by the May 1, 2000 deadline? Have the problems involving the “water-to-fuel ratio monitoring,” as outlined in the 2/23/00 letter from McPherson BPU to Rick Bolfig, been resolved?
- 15) * The requirement for installation and operation of continuous monitoring systems to monitor and record fuel consumption and the ratio of water to fuel being fired found at 40 CFR 334(a) is not mentioned anywhere in the permit except for references to “CMS” in sections A(2) & A(6) for NO_x control. The text only refers to the use of the data from the CMS. And there is virtually no mention of the CMS for #2 fuel flow in the operating permit at all. The CMS monitoring requirement should be included in the permit at the appropriate sections for both the NO_x monitor (A(2) +/-or A(6)) and the #2 fuel flow monitor (A(3)+/or A(7)). This requirement was included on page 5 under monitoring(1) in the construction permit.

Also, number (3) under monitoring in the construction permit (regarding applicable provisions of §60.13) should be included in the operating permit probably at the same locations as the CMS monitoring requirements mentioned above.

- 16) * Ice fog is addressed at §60.334(c)(3) and in the construction permit reporting section at 4(c). We could not find it in the proposed permit. Why was it not carried over as a reporting requirement?
- 17) * Subpart GG at §60.334(b) calls for monitoring of the sulfur content and nitrogen content of the fuel being fired. These requirements are included in the construction permit in number 2 of the monitoring requirements. Are all the requirements of number 2 carried over to the permit? Section A(7) of the permit addresses monitoring the nitrogen and sulfur content of natural gas per Attachment D. It also addresses monitoring of fuel oil for sulfur content, but it doesn’t say how! §60.335(e) directs one to paragraph (d) of §60.335 to determine sulfur content of liquid fuels. Shouldn’t this be referenced in the permit?

For determination of the nitrogen content of fuel oil, §60.335(e) directs one to (a) of §60.335. However, no method is specified in (a). How would the nitrogen content of the fuel oil be determined and how frequently? Shouldn’t this be referenced in the permit?

These are the initial formal EPA comments on the proposed Title V air operating permit for McPherson Power Plant #3. Due to time constraints, these comments are being made after the EPA 45-day comment period. R7 would ask that you consider the comments before issuance

of the final permit. If there are any questions or if you wish to discuss any of these comments, please contact Gary Schlicht of my staff at (913)551-7097.

Sincerely,

Don Toensing, Chief
Air Permitting & Compliance Branch